## **AMENDMENTS TO THE CLAIMS**

## 1 to 8. (Canceled)

**9.** (New) An FePt magnetic thin film having an atomic composition represented by the following Formula:

Fe<sub>x</sub>Pt<sub>100-x</sub> 
$$(19 < x \le 52)$$
.

- 10. (New) The FePt magnetic thin film according to Claim 9, having a thickness of less than 100 nm and an L1<sub>0</sub> structure.
- 11. (New) The FePt magnetic thin film according to Claim 9, being formed on a single crystalline substrate or on an oxide undercoat layer formed on the surface thereof.
- 12. (New) The FePt magnetic thin film according to Claim 11, being formed via a thin layer of one or more of transition and noble metals formed as an undercoat layer.
- 13. (New) The FePt magnetic thin film according to Claim 12, wherein the thin layer is a single layer or multiple layers.
- 14. (New) The FePt magnetic thin film according to Claim 13, wherein the thin layer has a layer of one or more of Fe, Ag, Ni, Co and Cr and a layer of one or more of Au, Pt, and Cu.
- 15. (New) A method of producing the FePt magnetic thin film according to claim 9, characterized by forming the FePt magnetic thin film by sputtering on a single crystalline substrate, a substrate having an oxide undercoat layer formed thereon, or a substrate having a thin layer of one or more of transition and noble metals as undercoat layer at a temperature in the range of 240°C to 500°C.

**16.** (New) The method of producing the FePt magnetic thin film according to Claim 15, wherein the FePt magnetic thin film is formed by sputtering at a temperature of 300°C or lower.